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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/761,281	01/16/2001	Michael Yip	2717P017	5580

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EXAMINER

LAM, DANIEL K

ART UNIT PAPER NUMBER

2667

DATE MAILED: 06/09/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/761,281

Applicant(s)

YIP ET AL.

Examiner

Daniel K Lam

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 1, 2, 5, 9 and 10** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There are insufficient antecedent basis in **claims 1, 2, 5, 9 and 10** regarding the following limitations:

- Claims 1 and 9 recite "the hash" in line 5.
- Claims 2 and 10 recite "the address" in line 2.
- Claim 5 recites "the hash" in line 7.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors

Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology

Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. **Claims 1-12** are rejected under 35 U.S.C. 102(e) as being anticipated by U. S. Pat. No. 6,665,297 issued to Hariguchi et al (hereinafter Hariguchi).

Regarding **claims 1, 5, and 9** Hariguchi discloses a deterministic routing method, a machine readable-accessible medium, and an apparatus for forwarding data packets to next hop, host, or server, comprising:

- Receiving Datagram packets from input ports 1 (42-1) to n (42-n) at a router 26 (receiving a data packet from a source at a data packet forwarding device having a plurality of ports). See fig. 2A and col. 4, lines 31-35.
- A hash circuit 82 using the embedded IP destination address Dest_ip_addr within the Datagram as a seed for performing hashing (performing a hashing function using a unique component of the data packet as a seed). See fig. 4, and col. 6, lines 40-45.
- A hash value generator circuit 156 generates a hash value (generating a hash value using the hash function). See fig. 4, and col. 6, lines 62-65.
- Using the hashed value as address pointing into hash bucket 160 for looking up a table of network address, output pointer, and H/M information (looking up a table for

address information of one of the servers using the hashed value as an index to the table). See fig. 4, and col. 6, line 66 to col. 6, line 2.

- Using pre-pending address logic 46, packet switch 48, and output ports 1 (50-1) to n (50-n) to forward the Datagram to next hop, host, or server (forwarding the data packet to a server using the address information obtained from the table). See fig. 2A, and col. 4, lines 41-45, and col. 5, lines 46-49.

Regarding **claims 2, 6, and 10**, in addition to disclose the limitations in claims 1, 5, and 9 discussed earlier, Hariguchi discloses forwarding the subsequent Datagram from input ports 1 (42-1) to n (42-n) through FIFO 46, pre-pending address logic 46 after obtaining the address from hash table 70, routing through packet switch 48, then transmitting the Datagram through output ports 1 (50-1) to n (50-n) (forwarding subsequent data packets from the source to the server using the hashing function). See fig. 2A.

Regarding **claims 3, 7 and 11**, in addition to disclose the limitations in claims 1, 5, and 9 discussed earlier, Hariguchi further discloses using the Dest_ip_addr from the Datagram to generate the hash value (generating a hash value using at least one parameter from a group consisting of a Transmission Control Protocol source port number, destination port number, IP source address, and IP destination address in the hash function). See col. 6, line 45.

Regarding **claims 4, 8, and 12**, in addition to disclose the limitations in claims 1, 5, and 9 discussed earlier, Hariguchi further discloses forwarding the Datagram to the server after searching the IP network or host address in the hash bucket 160 (see fig. 4).

Furthermore, he also discloses a route entry table 98 (see fig. 5) containing destination and next hop's IP address (searching a table for the address information of the server using the value generated by the hashing function and forwarding the data packet to the server).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel K. Lam whose telephone number is (703) 305-8605. The examiner can normally be reached on Monday-Friday from 8:30 AM to 4:30 PM.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (703) 305-4378. The fax phone number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status Information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the


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Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DKL *lpe*
June 3, 2004


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 6/7/04